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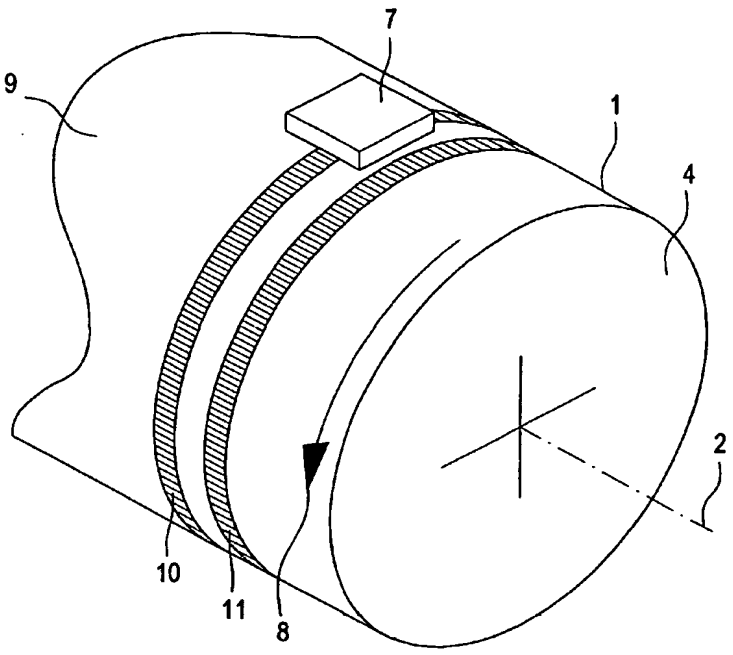
[Continued on next page]

(54) Title: ANGULAR DISPLACEMENT ENCODER WITH TWO MAGNETIC TRACKS



(57) Abstract: What is described is a configuration for determining the position of a body along a movement direction, wherein the body is in the form of a magnetized encoder with two magnetic tracks extending, on one surface of the body, along the movement direction, at least essentially in parallel with one another, wherein, at specified intervals along the movement direction, a first of the magnetic tracks exhibits magnetized sections in which the magnetic north poles are aligned so as to be at least largely coincident in a magnetization direction that is essentially at right-angles to the surface of the body, and wherein, at intervals specified to coincide with the above-mentioned intervals along the movement coordinate, the second of the magnetic tracks exhibits magnetized sections in which the magnetic south poles are aligned so as to be at least largely coincident in the said magnetization direction, and wherein, in each case, a magnetized section of one of the magnetic tracks is located at least largely centrally in relation to a gap between two magnetized sections of the other magnetic track, with a magnetoresistive sensor, in the form of an angle sensor, which is arranged above the magnetic tracks, for determining the directions of magnetic fields brought about by the magnetized sections of the magnetic tracks in an area extending along the movement coordinate, essentially in parallel with the surface of the body. By virtue of the invention, a simple configuration for the precise determination of the position of a body along a movement direction is created, wherein this configuration does not necessarily have to be affixed centrally upstream of the head of the body.

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	PATENT ABSTRACTS OF JAPAN vol. 007, no. 006 (P-167), 11 January 1983 (1983-01-11) & JP 57 165702 A (MAKOME KENKYUSHO:KK), 12 October 1982 (1982-10-12) abstract ---	1-8
A	US 5 444 370 A (WU MIEN T) 22 August 1995 (1995-08-22) figures 1,3 column 3, line 14 - line 68 column 4, line 33 -column 5, line 13 column 6, line 19 -column 7, line 20 claims 1,5,6 --- -/--	1-8

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	FABER-JURK, S

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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A	WO 01 42753 A (BOSCH GMBH ROBERT ;KLOTZBUECHER THOMAS (DE); SIEGLE HENRIK (DE); F) 14 June 2001 (2001-06-14) page 11, line 11 -page 15, line 16; figures 1-5	1-8

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